Assessment for Learning: Improving Transition from University

to Workplaces for Preservice Teachers in the 21st Century

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Abstract

This qualitative study intended to (1) explore existing assessment methods applied in a Thai preservice teacher program, (2) investigate assessment for learning and its elements that can promote professional identity and ease transition from university to workplace for preservice teachers in the 21st century working atmosphere, and (3) provide recommendations on improving assessment approaches for the preservice teacher training program. The semi-structured interviews were carried out to collect data from eight lecturers in the teacher training program. The findings revealed that (1) various assessment approaches were adopted as viewed proper by the lecturers such as multiple-choice, take-home, and project-based examinations for formative and summative assessments. Assessment for learning served the purpose of promoting the students' learning by engaging students, peers, and lecturers to seek, reflect upon, and respond to information. Feedbacks provided by students and lecturers were used for the improvement of teaching and learning regularly leading to self-regulation. This self-regulation enhanced teacher identity and eased transition from university to workplace in the 21st century of preservice teachers. A call for change of assessment approach to be more diverse and flexible was evident. Although the lecturers were uncertain about assessment for learning, they already adopted elements of assessment for learning in their classroom practices. Thus, it is possible to implement assessment for learning as assessment development which helps elevate teacher identity of the preservice teachers.

Keywords: Preservice teacher, Assessment for learning, University to work transition

Research background

The frameworks of 21st century skills are conceptualized by several international organizations and projects such as Partnership for 21st century skills, Metiri group and the Learning Point Associates, Assessment and Teaching of 21st

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Century Skills, and National Educational Technology Standards (Voogt & Roblin, 2012). What is common among these frameworks is the emphasis on collaboration, communication, ICT literacy, critical thinking, problem solving, and social and cultural competencies (Valtonen et al., 2021). Teaching is a highly complex skilled practice (Sutherland et al., 2010). Bridging the gap between practice and theory is the key to retain novice teachers in their profession and enhance their teaching quality (Holmqvist, 2019). A good teacher education program must pay attention to the conditions that can ensure a fruitful interaction of practice and theory through action and reflection to form teacher identity of preservice teachers (Dassa & Derose, 2017).

Identity of preschool teachers are central to professional qualifications, knowledge, acceptance and approval from administrators and colleagues, and appreciation including value offered by the career (Scherr & Johnson, 2019). The construction of professional identity of preservice teachers majored in early childhood education relies on the way they remember and interpret classroom experiences as student teachers. During their training, they collect educational memory that influences their thinking; they develop lay theories about teachers and teaching and a very strong sense about what it means to be a teacher (Androusou & Tsafos, 2018). School visits, micro-teachings, video reflections, model discussions, or case analyses are the opportunities that foster applying theory into practices which help preservice teachers alleviate the reality shock of being a new teacher (Sevimli-Celik, 2020). Apart from these teaching approaches, assessment plays an important role in measuring preservice teacher's learning which reflects the extent of teacher identity that each one forms (Eutsler & Curcio, 2019).

In Thai educational context, the importance of improving professional skills for the 21st century of preservice teachers has drawn great research attention. However, none of research has been found conducted to examine how assessment for learning (AfL) can enhance identity of preservice teachers in Thai education context. Thus, this study will shed light on using AfL to enhance professional identity of Thai preservice teachers for the 21st century which leads to easing transition from university to workplace.

Research questions

The research questions are as the following.

1) What assessment methods have been applied in a preservice teacher training program in Thailand?

2) What is assessment for learning (AfL) and how its elements can be used to promote professional identity and ease transition from university to workplace of preservice teachers in the 21st century?

3) What can be done to improve assessment approaches for the preservice teachers to enhance their transition from university to workplace in the 21st century?

Research scope

A phenomenon of assessment approaches adopted in a Thai preservice teacher training program was explored through Early Childhood Education program, Faculty of Education, Suan Dusit University. Qualitative research method was employed to investigate the phenomenon. According to Medico & Santiago-Delefosse (2014), the qualitative method supports the purpose of this study and there has not been any research conducted to explore the phenomenon in this context. The interviews were used to collect data from the lecturers working in the program from all campuses concerning their experience in applying assessment methods, elements of AfL that could be useful for teacher training, and recommendations on improving assessment approaches for the program.

Theory of assessment for learning

Assessment is central to the learning experience of students beyond anything. The assessment determines what students consider essential, how they spend their time, and how they view themselves as students before graduation (Lombardi, 2008). AfL has been recognized as one of the most powerful strategies for promoting student learning (Gardner, 2012). AfL moves away from traditional assessment that adopts multiple-choice assessments. Traditional assessment assumes that knowledge has universal meaning and views assessment as objective, value-free, and neutral. The purpose of traditional assessment is for documenting learning (Rosemartin, 2013).

AfL's theoretical framework is drawn upon constructivism and cognitive science. Constructivist views that knowledge is actively constructed by the learners from their own experiences and thus pays strong attention to social interaction, in particular instructor and learner. Cognitive science emphasizes metacognition as an important component of assessment. Metacognitive strategies include an awareness of what one is doing and the strategies one is employing to handle a task. Metacognitive skill demands self-regulation from learners. Learners need to have self-monitor, self-evaluate, and self-assess their learning during and after the learning process (Berry, 2008). AfL is reflected as assessment that supports learning (Laveault & Allal, 2016). AfL largely focuses on role of instructor in giving feedback to provide understanding to students of the gap between their current performance and the learning goals that are aimed for. Eliciting students' reflection on instructor feedback in student-instructor conversations helps students shape metacognitive knowledge on the effectiveness of their learning strategies (Baas et al., 2015).

AfL's features rest on collaboration between the instructor and student through sharing criteria of assignments, developing classroom dialogue and questioning, giving appropriate feedback, and peer- and self-assessments (Swaffield, 2011). The key principles of AfL include being a part of effective planning, centering on classroom practice, holding a key professional skill, having an emotional impact, affecting learner motivation, promoting commitment to learning goals and assessment criteria, encouraging self-assessment, and helping learners know how to improve their learning achievement (Abbasnasab Sardareh & Mohd Saad, 2013).

Phenomenology

Qualitative inquiry fulfills an attempt of this study to explore variation in the data based on experience and practice of lecturers in applying assessments to measure attributes and skills of preservice teachers (Levitt, 2021). Phenomenology is a branch of qualitative research intending to describe the essence of the phenomenon that contributes to an understanding of meaning (Randles, 2012). Phenomenology represents the realities grounded on experience concerning assessment approaches that lecturers in the early childhood education program have employed in their teaching both online and traditional. Interview is a strategy that researchers utilize to investigate lived experiences (Padilla-Díaz, 2015).

Purposive sampling

Suan Dusit University has operated Early Childhood Education Program in four campuses located in Bangkok, Suphan Buri, Nakhorn Nayok, and Lampang. Therefore, the research team selected two lecturers of the Early Childhood Education Department of Suan Dusit University from each campus with a total of eight lecturers to share their insights concerning assessments. The study adopted purposive sampling which is proper for exploring phenomenon in qualitative studies (Berndt, 2020). The research team predetermined the participant criteria which correspond to the scope of study focusing on the assessment approaches applied in the Early Childhood Education Department of Suan Dusit University (Vehovar et al., 2016). The data was collected until it was saturated as the method aimed to obtain a comprehensive understanding of phenomenon (Guest et al., 2006).

Semi-structured interview

This study adopted one-to-one semi-structured interview (SSI) to learn about the lecturers' individual perspectives based on their experiences of employing assessments to preservice teachers (McIntosh & Morse, 2015). The content validity of interview questions was judged by researchers in the team and supervisor who have had teaching experience in the university level for 8-15 years. After the pilot interviewing test, wording in the questions was adjusted to be more concise and clearer. The research topic and its usefulness were added to inform the participants before the start of interviews (Barriball & While, 1994).

The research team formulated a loose set of open-ended questions which gave space for all participants to have individual expression concerning the phenomenon (Dearnley, 2005). The set of questions consisted of three parts i.e., introduction, exploration of the core phenomenon, and final reflections. Introduction was set up to provide explanation of the research topic and acquire the consent from each participant. Exploration of the core phenomenon was the heart of interview containing questions exploring series of experiences. Final reflections as the last section gave the participants an opportunity to describe the insights that come to their minds. It was an option for having open comments from the

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participants (Bearman, 2019). Prior to the interviews, the participants were acknowledged of ethical principles regarding anonymity and confidentiality. The ethical principles increased likelihood of honesty in the interviews (Harrell & Bradley, 2009). During the interviews, the interviewer improvised follow-up questions and arranged ordering of questions depending on each participant's responses (Kallio et al., 2016). All the interviews were conducted virtually of which rapport was very similar to face-to-face approach (Oates, 2015).

All participants were interviewed individually for 40-60 minutes. The interviews were scheduled according to convenience of participants (Gill et al., 2008). The interviewer adopted open and emotional body languages that created positive atmosphere such as nodding, smiling, and making eye contact to make the interviewees feel relaxed and enjoy with the interviews (Brown & Danaher, 2019). Probing languages were used to acquire clearer answers such as "Please tell me more about….", "Do you think….?", and "Do I correctly understand that ….?". In this regard, the interviewer avoided using leading language and explained some jargons (DeJonckheere & Vaughn, 2019).

Thematic analysis

Thematic analysis is a method for systematically identifying, organizing, and offering insights into pattern of meaning (themes) across a dataset (Braun & Clarke, 2012). This study adopted thematic analysis to analyze data acquired from the interviews to see and make sense of collective experiences (Riger & Sigurvinsdottir, 2016). Themes provides a framework for organizing and reporting analytic observations. In constructing themes, the research team formed codes which were the building blocks for themes underpinned by a shared core idea (Clarke & Braun, 2017). To become familiar with the dataset for shaping codes and themes, the research team looked for answers from some basic descriptive questions as exampled below.

• What was happening?

• What was the participants saying?

• What key points or ideas were they expressing?

• What points did they appear to agree or disagree about?

• What perspectives were (dis)similar?

• What experiences did they hold in common? (Lochmiller, 2021).

Inductive approach which allows codes and themes to emerge direct from the data was employed (Fereday & Muir-Cochrane, 2006). Inductive coding and theme development use the data as the starting point as bedrock for identifying meaning and interpreting data; the approach involved working 'bottom up' from the data (Terry et al., 2017). Based on the inductive strategy, the analytical approach fostered a broad and expansive analysis of the entire body of data leading to an insight into the phenomenon (Kiger & Varpio, 2020).

Research findings

A total of five themes were created around the research questions. Their details are described below.

1) The existing assessment approaches adopted in the teacher training program

The Early Childhood Education Department, Faculty of Education, Suan Dusit University adopts formative and summative assessments. Both forms of assessments were employed aiming to enhance knowledge and practices of preservice teachers. Overall, the ratio of formative assessment to summative assessment is 60:40 or 70:30.

In relation to formative assessments of onsite classes, group assignments are usually adopted to enable the students to practice social and communication skills. Integration of some courses is initially implemented. Assessment methods are relatively diversified such as story mapping to reflect learning, seminar handbook, and teaching practices. Weekly quiz is arranged according to the convenience of individual lecturer. The rubrics of assignments have been seldom clarified and informed to the students. Peer to peer reflections are carried out regularly. Observation on personal understanding of students towards content knowledge is convenient.

The formative assessments for online classes are adapted to suit with virtual learning caused by COVID-19. A number of individual assignments are risen while that of group assignments is minimized. *'Group tasks are inconvenient during online classes because the students cannot meet one another.' (V3)* Knowledge contents and tasks from different courses is increasingly integrated to reduce overall workload of students. The tasks include producing learning roadmap or mind map, cartoon graphic, project, video clips, and modelled application. Weekly quiz in each campus is quite similar because of coursework integration. The rubrics of assignments is clarified and informed to the learners. *'The rubrics are informed to the students so they will know how to produce work according to its requirements.'(N4)* Various techniques are used to encourage the students to turn on their webcams while attending online classes. Additional applications for assessments are used. Recently, learning progress of individual learner is assessed additionally. The lecturers assess it through the answers given by each student after each virtual learning session.

The summative assessments of onsite and online classes remain the same in terms of types, but their platforms are changed. The summative assessments of general education courses are primarily relied on multiple-choice examination. The students are requested to show up and take tests in examination rooms for onsite examination with a fix duration. However, the students are required to turn on their webcams during COVID-19 online examination and the items of examination are randomly alternated by the virtual platforms to prevent fraudulence. The summative assessments of specialized subjects are designated with greater diversity i.e., multiple-choice, take-home, and project-based examinations.

2) Assessment for learning and its elements promoting identity of preservice teachers

Assessment for learning refers to an approach that promotes engagement of students in their learning progress and becoming self-regulated learners aiming to increase knowledge understanding and learning skills of students rather than achieving standardized tests. AfL provides feedbacks which is used to improve learning performance of students and teaching strategies of teachers to help close the gap between a student's current stage and a level that one wants to reach for academic achievement in teacher education easing their transition from the university to workplace.

AfL's elements comprising feedback and reflection are likely to foster identity of preservice teachers. The assessment notifies the students of their competence level reflected through level grades. The feedbacks given by lecturers inform the preservice teachers of what parts need to be improved, what areas they are skillful, and what sections they favor. For instance, some preservice teachers are good at creating teaching materials while some are very skillful in writing an academic paper. *'The students can use assessment results to compare their personal abilities across subjects' (S8)* The reflection given by the preservice teachers through a learning journal informs a lecturer how to adjust her teaching strategies to be suitable for students' learning which can support their academic achievement. *'Sometimes the preservice teachers reflect that I speak too fast. I make an apology and try to speak more slowly.' (J6)*

Overall, the effects of AfL in promoting identity of the preservice teachers in Suan Dusit University have been mentioned limitedly because most lecturers are uncertain about AfL approach and AfL has not yet been introduced at the faculty level as the formal assessment approach. A lecturer considers that AfL may also relate to aspects of Thailand Qualification Framework. *'I have heard about AfL. I understand that it concerns learning outcomes and six aspects of Thailand Qualification Framework.' (C2)* However, the existing assessment strategies applied by most lecturers embed AfL's elements in terms of feedback and reflection which makes it possible for the university to introduce AfL as a formal assessment approach for the Early Childhood Education Program of the university which is likely to improve learning outcomes of the preservice teachers.

3) Advantages of existing assessment approaches

The existing assessment approaches promote listening, speaking, reading, and writing skills of preservice teachers. Writing skill of students is relatively poor because the skill requires thinking process, analysis, synthesis, and conclusion. Learning journal enhances the students to reflect their learning on weekly basis. The students are requested to show how to apply their knowledge to their profession in writing this journal. The students need to describe their feelings towards teaching styles of a lecturer and how they want the course to be adjusted or modified. The lecturer also writes back to reflect her opinions in this journal. *'Sometimes the preservice teachers reflect that I speak too fast. I make an apology and try to speak more slowly.' (J6)* The learning journal promotes self-awareness and cognitive empathy which are the good start for professional development.

Integration of courses is useful as it allows the students to utilize knowledge, have diverse learning, work in a team, and plan tasks accordingly. Project-based assessments reflect authentic abilities of learners. *'For creating a TV program, ….the students need to know 1) principles of teaching arts to preschoolers, and 2) what materials that are appropriate to preschoolers' (N4)* The students also have hands-on practices by having teaching sessions at schools which allows them to see different learning contexts and actual preschool behaviors. Peer to peer assessments train the students in having analysis and critique of their own work and that of the others. Then, lecturers help confirm the perspectives. Lecturers and peers admire work of students to encourage them to see that their efforts are valuable. The peer-to-peer assessments advocate opinion sharing among classmates.

Diversified assessments reflect abilities of students more comprehensively. Expertise of each student is showed. *'I use different assessment approaches because I believe that each student is different, and I cannot force them to be the same at this age.' (N4)* Diversified assessments enable the students to practice different skills such as teamwork, self-management, planning, and completing work on time. Group tasks develop leadership and social skills of students. Individual tasks can demonstrate intention of each student. Quizzes are considered appropriate because lecturers can give prompt feedbacks to the students. The quizzes can inform whether understanding of students is right or wrong.

4) Disadvantages of existing assessment approaches

Overall, if the assessment criteria are unclear, the students will not have principles for critiquing their peers' work. They may give comments based on their feelings. *'If the students do not understand the concept of a task, their critique will not be effective.' (P1)* Bias in giving marks has been occurred among the lecturers. Regular quizzes can make students feel nervous although their entire points are very small. Also, a lecturer needs to spend additional time in preparing the quizzes.

Several disadvantages of assessment for online classes during COVID-19 are revealed. In online learning classes, it is difficult to evaluate reaction of students because they seldom turn on their webcams which make answering and questioning unclear. Many courses assign take-home examinations as summative assessment. Nevertheless, the students do not answer the questions deeply. *'The students do not understand this concept (of take-home examination). They answer the questions in the same way they do for write-up examination.' (S8)* The students are confused because they need to submit take-home examinations for several courses in the same period. The period given for a take-home examination is approximately 12-24 hours, rather than 3-4 days which is too short because each lecturer is responsible for several subjects. Reading answers and then sending the marks to the department committees for verification takes some time. The period of submitting grades and scores into the system is fixed for the lecturers. For these reasons, some lecturers do not support take-home exams. They view it is better to have online examination or designate a project.

During the online examination compelled by COVID-19, most examinations rely on a multiple-choice format. The lecturers do not know if the students search for answers in textbooks or not. The problem for this online examination is that the students cannot fill in all answers into the system in time. *'In general education courses, …. the students inform that they cannot submit answers in time. This leads to new and re-examinations.' (P5)* Any projects assigned during the online classes are usually responsible by an entire class which limits assessing individual knowledge. In addition, having a teaching practice via virtual platforms instead of a real classroom makes the preservice teachers lack of direct and authentic teaching experiences.

5) The direction of improving assessment methods

Assessment methods need to be improved in several aspects. The evaluation procedures should be shared among lecturers, rather than letting each lecturer decides by herself. The assessment process should be taken into consideration as much as those of learning and teaching. *'Presently, learning and teaching processes have been more focused.' (S8)* The assessments should be continuously adjusted and revised corresponding to the requirements of Teachers Council of Thailand. The lecturers and students should involve with determining marks with a proper balance. A standard criterion or rubric should be set up for giving feedbacks. The standard criterion or rubric minimize the biases of lecturer and students leading to more constructive feedbacks. The rubrics enable the students to have better self- and peer-assessments. The language of rubrics should not be too academic because the students may not understand it. The existing assessments are well diversified and relatively comprehensive offering both group and individual assignments. The score ratio maybe adjusted, not 70:30 of formative to summative assessments. Formative assessment approaches for online class should be provided more clearly.

Some lecturers view that all campuses should use the same form of assessment for standardization. Each course needs to create assessment framework to be able to give assignments in the same direction. *'The preservice teachers (in other campuses) should acquire the same learning outcomes as those of in Bangkok campus. I have a concern over the standard.' (C2)* On the contrary, some lecturers mention that the department should create only a general assessment framework. They want to have flexibility in tailoring the assessment approaches that are proper for learning contexts and characteristics of students in different campuses with unique assessment approaches. '*The assessment approaches should be flexible…because the students (in different campuses) are not the same. But the students will receive the same body of knowledge.' (V3)*

Interview is also good as it allows the students to express their attitudes. Discussion should be held more frequently to encourage the students to think and express their opinions. The assessment criteria can be adjusted to pass/fail in addition to level grades. The level grades create pressure to the students and may not be able to assess actual competences of students. Also, a number of students acquiring A-level grade in each classroom should not be limited to increase happiness in learning and reduce stress.

The final examination of paper-based examination should be replaced by interview and project-based examinations to fulfill course learning outcomes relying on the nature of each subject. For test examination, open book examination is more appropriate than the multiple-choice examination. It is essential to convince other lecturers of benefits of writing for the students. Nevertheless, replacing multiple-choice examination is not easy because the students are required to attend a Teaching License examination devised by a related government authority. If the students fail this multiple-choice examination for the license, the lecturers will be reprimanded. Assessments should be authentic with less emphasis on marks.

Discussion of findings

The study found out that the multiple-choice examination should be used for some basic subjects only. This notion is in line with other studies mentioning that the multiple-choice examination can be used for identifying individual and/or collective errors and misconceptions of preservice teachers (Martin & Itter, 2014). The open book examination is proposed to replace the multiple-choice examination as it allows the preservice teachers to exercise their thinking and analytical skills. This suggestion corresponds with the research carried out by Chible (2021) mentioning that the appropriate online examinations without a proctored environment should be based on an open book test idea, open lecture notes, and open internet resources to minimize or cancel cheating, and thus consider the online examination as valid as the onsite one.

Various assessment approaches should be adopted to reflect the preservice teacher's capacity more comprehensively aligning with the research conducted by Cruickshank and Metcalf (1993). Using project-based assessment as final examination rather than paper-based examination corresponds to the study of Oh and French (2004) revealing that project-based assessment enables the students to gain necessary skills through cross-curricular hands-on practice. The interview was seldom used for assessing the attitudes of preservice teachers which is contrast to the findings of this study (Weiland et al., 2014). The option of assigning pass/fail grade conforms with the findings of Donaldson and Gray (2012) stating that pass/fail reduces stress and anxiety in students and increase group cohesion without any association with a decline in students' academic performance nor attendance.

The perception of using rubrics to improve self- and peer-assessments among preservice teachers conforms with the study of Panadero and Romero (2014), and Hitt and Helms (2009) respectively. Involving the preservice teachers in assessment process urges their self-regulation in learning complies with the research of Ng (2016). Generosity and courtesy are important elements of teacher identity underpinned by the work of Little (1990) stating that socioemotional support that teachers offer one another brings about collaborative schools.

Although most lecturers are uncertain about the features of AfL, they have adopted several features of AfL in practices such as having self- and peer- assessments in classroom based on the rubrics and providing feedbacks regularly. These practices can enhance professional development of preservice teachers by promoting self-regulation (Hawe & Dixon, 2017) which is important for achievement in the 21st century workplace environment (Whorton et al., 2017).

A call for more assessment flexibility for students in different campuses is consistent with the study of Irwin and Hepplestone (2012) that highlights benefits of flexible assessment format in terms of preparing students for future needs and life-long learning. Involving students in assessment in a proper balance complies with the study of Willis and Adie (2014) which consider engaging students in their assessments is important, as it helps activates learners as the owners of their own learning. The demand that formative assessment approaches for online class should be determined more clearly goes along with the research of Gikandi, Morrow, and Davis (2011) dealing with validity and reliability of online assessments.

Implications for practice

The research findings can be useful for any educators and policymakers as guidance to revise and transform assessment approaches to be more corresponding to the workplace environment of the 21st century. Although the research data is collected from one teacher training program, its findings can be generalized to other teacher training programs in a certain level because of similar learning context in Thailand. The discussion of findings can also be beneficial for improving teacher training programs in Thailand and other developing countries.

Future research

Future studies may explore AfL from perspectives of policymakers and preservice teachers. Phenomenon of AfL in different learning contexts should be further explored. The implementation of AfL can also be carried out to concretely examine its advantages and disadvantages for professional development of preservice teachers.

References

Abbasnasab Sedigheh, S., & Mohd Saad, M. R. (2013). Defining Assessment for Learning: A proposed

definition from a sociocultural perspective. *Life Science Journal*, *10*(2), 2493-2497.

Androusou, A., & Tsafos, V. (2018). Aspects of the professional identity of preschool teachers in Greece:

investigating the role of teacher education and professional experience. *Teacher Development*, *22*(4),

554-570. https://doi.org/10.1080/13664530.2018.1438309

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Baas, D., Castelijns, J., Vermeulen, M., Martens, R., & Segers, M. (2015). The relation between Assessment for Learning and elementary students' cognitive and metacognitive strategy use. *British Journal of Educational Psychology*, *85*(1), 33-46.

Barriball, K. L., & While, A. (1994). Collecting data using a semi-structured interview: A discussion paper. *Journal of Advanced Nursing-Institutional Subscription*, *19*(2), 328-335.

Bearman, M. (2019). Eliciting rich data: A practical approach to writing semi-structured interview schedules. *Focus on Health Professional Education: A Multi-disciplinary Journal*, *20*(3), 1-11.

Berndt, A. E. (2020). Sampling methods. *Journal of Human Lactation*, *36*(2), 224-226.

Berry, R. (2008). *Assessment for learning*. Hong Kong University Press. http://www.jstor.org/stable/j.ctt1xcs68

Braun, V., & Clarke, V. (2012). Thematic analysis. In *APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological.* (pp. 57-71). American Psychological Association. https://doi.org/10.1037/13620-004

Brown, A., & Danaher, P. A. (2019). CHE Principles: facilitating authentic and dialogical semi-structured interviews in educational research. *International Journal of Research & Method in Education*, *42*(1), 76-90. https://doi.org/10.1080/1743727X.2017.1379987

Chible, H. (2021). Proposed Method to Be Adopted For Online Exam Without Proctored Environment During Covid 19. *International Journal of Scientific Research in Multidisciplinary Studies*,*7*(4).

Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, *12*(3), 297-298. http://dx.doi.org/10.1080/17439760.2016.1262613

Cruickshank, D. R., & Metcalf, K. K. (1993). Improving preservice teacher assessment through on-campus laboratory experiences. *Theory Into Practice*, *32*(2), 86-92. https://doi.org/10.1080/00405849309543580

Dassa, L., & Derose, D. S. (2017). Get in the Teacher Zone: A Perception Study of Preservice Teachers and Their Teacher Identity. *Issues in Teacher Education*, *26*(1), 101-113. https://files.eric.ed.gov/fulltext/EJ1139340.pdf

Dearnley, C. (2005). A reflection on the use of semi-structured interviews. *Nurse Researcher (through 2013)*, *13*(1), 19-28.

DeJonckheere, M., & Vaughn, L. M. (2019). Semistructured interviewing in primary care research: a balance of relationship and rigour. *Family Medicine and Community Health*, *7*(2), e000057.

Donaldson, J. H., & Gray, M. (2012). Systematic review of grading practice: Is there evidence of grade inflation? *Nurse Education in Practice*, *12*(2), 101-114. https://doi.org/10.1016/j.nepr.2011.10.007

Eutsler, L., & Curcio, R. (2019). Private blog reflections connecting course content with field experiences: preservice teachers grapple with teacher identity. *Reflective Practice*, *20*(2), 250-265. https://doi.org/10.1080/14623943.2019.1586663

Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, *5*(1), 80-92. https://doi.org/10.1177/160940690600500107

Gardner, J. (2012). *Assessment and learning* (2nd ed.) https://doi.org/10.4135/9781446250808

Gikandi, J. W., Morrow, D., & Davis, N. E. (2011). Online formative assessment in higher education: A review of the literature. *Computers & Education*, *57*(4), 2333-2351.

Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British Dental Journal*, *204*(6), 291-295. https://doi.org/10.1038/bdj.2008.192

Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough?: An experiment with data saturation and variability. *Field Methods*, *18*(1), 59-82. https://doi.org/10.1177/1525822X05279903

Harrell, M. C., & Bradley, M. A. (2009). *Data collection methods: Semi-structured interviews and focus groups*. https://apps.dtic.mil/sti/pdfs/ADA512853.pdf

Hawe, E., & Dixon, H. (2017). Assessment for learning: a catalyst for student self-regulation. *Assessment & Evaluation in Higher Education*, *42*(8), 1181-1192. https://doi.org/10.1080/02602938.2016.1236360

Hitt, A. M., & Helms, E. C. (2009). Best in Show: Teaching old dogs to use new rubrics. *Professional Educator*, *33*(1). https://files.eric.ed.gov/fulltext/EJ862760.pdf

Holmqvist, M. (2019). Lack of qualified teachers: A global challenge for future knowledge development. In *Teacher education in the 21ˢᵗ century* (pp. 1-13). https://www.intechopen.com/chapters/65030

Irwin, B., & Hepplestone, S. (2012). Examining increased flexibility in assessment formats. *Assessment & Evaluation in Higher Education*, *37*(7), 773-785. https://doi.org/10.1080/02602938.2011.573842

Kallio, H., Pietilä, A.-M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of advanced nursing*, *72*(12), 2954-2965.

Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, *42*(8), 846-854. https://doi.org/10.1080/0142159X.2020.1755030

Laveault, D., & Allal, L. (2016). *Assessment for learning: Meeting the challenge of implementation* (Vol. 4). Springer.

Levitt, H. M. (2021). Qualitative generalization, not to the population but to the phenomenon: Reconceptualizing

   variation in qualitative research. *Qualitative Psychology*, *8*(1), 95-110.

   https://doi.org/10.1037/qup0000184

Little, J. (1990). The persistence of privacy: Autonomy and initiative in teachers. *Teachers college record*, *91*(4),

   509-536.

Lochmiller, C. R. (2021). Conducting thematic analysis with qualitative data. *Qualitative Report*, *26*(6).

Lombardi, M. M. (2008). Making the grade: The role of assessment in authentic learning. *EDUCAUSE Learning

   Initiative*, 1-16. http://146.186.15.14/users/j/m/jmd394/saw4/infoseek/makingthegrade.pdf

Martin, D. L., & Itter, D. (2014). Valuing assessment in teacher education-Multiple-choice competency

   testing. *Australian Journal of Teacher Education (Online)*, *39*(7), 1-14.

   https://files.eric.ed.gov/fulltext/EJ1029779.pdf

McIntosh, M. J., & Morse, J. M. (2015). Situating and constructing diversity in semi-structured

   interviews. *Global Qualitative Nursing Research*, *2*. https://doi.org/10.1177/2333393615597674

Medico, D., & Santiago-Delefosse, M. (2014). From reflexivity to resonances: Accounting for interpretation

   phenomena in qualitative research. *Qualitative Research in Psychology*, *11*(4), 350-364.

   https://doi.org/10.1080/14780887.2014.915367

Ng, E. M. W. (2016). Fostering pre-service teachers' self-regulated learning through self- and peer assessment of

   wiki projects. *Computers & Education*, *98*, 180-191.

Oates, J. (2015). Use of Skype in interviews: The impact of the medium in a study of mental health nurses. *Nurse

   Researcher (2014)*, *22*(4), 13.

Oh, E., & French, R. (2004). Pre-service teachers' perceptions of an introductory instructional technology

   course. *Electronic Journal for the Integration of Technology in Education*, *3*(1), 37-48.

   https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.548.2295&rep=rep1&type=pdf

Padilla-Díaz, M. (2015). Phenomenology in educational qualitative research: Philosophy as science or

   philosophical science. *International journal of educational excellence*, *1*(2), 101-110.

   http://www.anagmendez.net/cupey/pdf/ijee_1_2.pdf#page=102

Panadero, E., & Romero, M. (2014). To rubric or not to rubric? The effects of self-assessment on self-regulation,

   performance and self-efficacy. *Assessment in Education: Principles, Policy & Practice*, *21*(2), 133-148.

   https://doi.org/10.1080/0969594X.2013.877872

Randles, C. (2012). Phenomenology: A review of the literature. *Update: Applications of Research in Music

   Education*, *30*(2), 11-21.

Riger, S., & Sigurvinsdottir, R. (2016). Thematic analysis. *Handbook of methodological approaches to community-based research: Qualitative, quantitative, and mixed methods*, 33-41.

Rosemartin, D. S. (2013). Assessment for learning: Shifting our focus. *Kappa Delta Pi Record*, *49*(1), 21-25. https://doi.org/10.1080/00228958.2013.759826

Scherr, M., & Johnson, T. G. (2019). The construction of preschool teacher identity in the public-school context. *Early Child Development and Care*, *189*(3), 405-415.

Sevimli-Celik, S. (2020). Moving between theory and practice: preparing early childhood pre-service teachers for teaching physical education. *Journal of Early Childhood Teacher Education*, *42*(3), 281-298. https://doi.org/10.1080/10901027.2020.1735588

Sutherland, L., Howard, S., & Markauskaite, L. (2010). Professional identity creation: Examining the development of beginning preservice teachers' understanding of their work as teachers. *Teaching and Teacher Education*, *26*(3), 455-465. https://doi.org/10.1016/j.tate.2009.06.006

Swaffield, S. (2011). Getting to the heart of authentic Assessment for Learning. *Assessment in Education: Principles, Policy & Practice*, *18*(4), 433-449. https://doi.org/10.1080/0969594X.2011.582838

Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. *The SAGE handbook of qualitative research in psychology*, *2*, 17-37.

Valtonen, T., Hoang, N., Sointu, E., Näykki, P., Virtanen, A., Pöysä-Tarhonen, J., . . . Kukkonen, J. (2021). How pre-service teachers perceive their 21st-century skills and dispositions: A longitudinal perspective. *Computers in Human Behavior*, *116*. https://www.sciencedirect.com/science/article/pii/S0747563220303903

Vehovar, V., Toepoel, V., & Steinmetz, S. (2016). The SAGE handbook of survey methodology. In. SAGE Publications Ltd. https://doi.org/10.4135/9781473957893

Voogt, J., & Roblin, N. P. (2012). A comparative analysis of international frameworks for 21st century competences: Implications for national curriculum policies. *Journal of Curriculum Studies*, *44*(3), 299-321. https://doi.org/10.1080/00220272.2012.668938

Weiland, I. S., Hudson, R. A., & Amador, J. M. (2014). Preservice Formative Assessment Interviews: The Development of Competent Questioning. *International Journal of Science and Mathematics Education*, *12*(2), 329-352. https://doi.org/10.1007/s10763-013-9402-3

Whorton, R., Casillas, A., Oswald, F. L., Shaw, A., Burrus, J., Mattern, K., . . . Roberts, R. (2017). Critical Skills for the 21st Century Workforce. *Building better students: Preparation for the workforce*, 47-72.

Willis, J., & Adie, L. (2014). Teachers using annotations to engage students in assessment conversations:

recontextualising knowledge. *The Curriculum Journal*, *25*(4), 495-515.

https://doi.org/10.1080/09585176.2014.968599