

Pedagogical Meanings and Implications of the 4Cs  
(Hasan Bedir, 2019)

4C Skills	Pedagogical Meanings and Implications
Critical thinking	<p>Critical thinking and reflection allow us to detect misconceptions and underlying problems as well as see new opportunities in practice (Noonan, 2013, 177). Critical thinking skills enable preservice teachers “to reflect on their practice in meaningful ways, to consider the effect their teaching has on student learning, and develop habits that will stay with them” (Ward &amp; McCotter, 2004, p. 244). Pre-service teachers can involve in professional development activities; Identify and ask significant questions that clarify various points of view and lead to better solutions; Frame, analyse and synthesize information in order to solve problems and answer questions. Engage in learning experiences requiring in depth and complex thinking. Through this process they analyse, infer, compare, reason, interpret, synthesize, and evaluate. They also ask questions and approach the issues from different perspectives.</p>
Creative thinking	<p>Creative thinking is developing the productive thought incorporating both creative thinking of pre-service teachers. Creative thought can be imagining situations and events, generating new characters or scenarios, producing tentative explanations or solutions, and planning actions (Moseley et al., 2005, p. 313). It is imperative for teacher education programs that they develop, model, and assess what it means to be creative (Beghetto, 2007). Pre-service teacher must demonstrate ability to work effectively and respectfully with diverse teams; Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal; Plan instruction purposefully using a wide range of idea creation techniques encourages students to apply creative thinking and problem solving skills. When pre-service teachers examine and evaluate instructional methods from different perspectives, they think in new directions, and synthesize information in useful ways to demonstrate their creative thinking abilities.</p>
Collaboration	<p>Collaboration is commitment to work skillfully with others in groups. Collaborators create effective groups by (1) establishing goals, (2) sharing ideas and workload, (3) serving as facilitators and contributors, (4) sharing power and decision making, and (5) engaging in productive conflict (Johnson &amp; Johnson, 2013, pp. 24-26). Professional learning communities (PLCs) providing discussion is effectively used to integrate collaboration and communication skills into pre-service teacher education (Kagle, 2014). Pre-service teachers also can work with their peers or in small groups to investigate and collaborate to develop their content, pedagogical and technological knowledge. They can also collaborate to discuss students’ actions, find similarities and differences between the students from different classes, to use graphic organizers for drawing inferences or conclusions etc. about their teaching practices.</p>
Communication	<p>Communication is briefly to express themselves effectively, whether in productive skills as spoken or written forms, or receptive skills as listening and reading. Pre-service teachers must develop communication skills to exchange information, feelings, and meaning through verbal and non-verbal messages; Present their lessons using various channels of communication and multimedia formats. Use tone of voice, facial expressions, gestures and body language effectively They also learn how to use computers, the Internet and digital and mobile devices to make reading books and watching TV as an interactive communication activity.</p>