This study examined the training needs of secondary regular school teachers in Delhi, India in order to effectively teach students with disabilities in inclusive classroom settings. 130 teachers responded to a two-part survey. A discrepancy analysis model was used to determine the training needs of the teachers. Data was analyzed using descriptive statistics. The competencies needed most strengthening were: professional knowledge concerning exceptional children, assessment of students’ needs and resources for classroom learning. The implications for teacher training in India are discussed in terms of the different models that can improve teacher quality for inclusive education.